

CLAIMS

What is claimed is:

1. An assembly to resect a selected bone portion, comprising:
a positioning member fixed relative to the selected bone portion;
a guiding member rotatably extending from said positioning member;
a resecting member guided by said guiding member;
wherein said resecting member is rotatable around said positioning member to at least one position relative to said positioning member.

2. The assembly of claim 1, wherein said positioning member is disposed within the selected bone portion.

3. The assembly of claim 1, wherein said positioning member is disposed in the medullary portion of the femur.

4. The positioning member of claim 1, having a width of about 0.5 to 2.0 cm.

5. The assembly of claim 1, wherein said resecting member includes:
a resecting head having a dimension of about 0.5 cm to about 3.0 cm; and
a shaft extending from said resecting head having a width of about 0.25 cm to 2.0 cm.

6. The assembly of claim 1, wherein said guiding member includes:
a first portion operably interconnected to said resecting member;
and
second portion extending from said first portion and operably interconnected to said positioning member to allow said first portion to rotate relative to said positioning member.

7. The assembly of claim 6, further comprising:
 - a resecting member holder to operably interconnect said resecting member and said second portion of said guiding member;
 - wherein said resecting member holding member allows for translation of said resecting member along a length of said second portion of said guiding member.
8. The assembly of claim 1, further comprising:
 - a depth selection assembly including:
 - a selection portion operably interconnected with said resecting member to provide an axial selection of said resecting member; and
 - a fixable sleeve operably interconnected with said selecting member such that said selecting member may operably engage said sleeve to select a depth of said resecting member relative to said positioning member.
9. The assembly of claim 1, wherein said positioning member and said resecting member operably interact through a substantially less invasive procedure to resect the selected bone portion;
 - wherein substantially only said positioning member and said resecting member engage the selected bone portion.

10. The assembly of claim 1, further comprising:
a second guiding member to operably interconnect said first guiding member and said resecting member;
wherein said second guiding member allows for a selected radial translation of said resecting member relative to said positioning member.

11. The assembly of claim 10, further comprising:
a third guiding member, including:
a sleeve disposed relative to said resecting member; and
a sleeve engaging member fixed at a position relative to said resecting member such that said fixing member engages said sleeve at a selected time;
wherein said third guiding member selects an axial movement of said resecting member;
wherein said second guiding member selects a radial movement of said resecting member;
wherein said guiding member selects a rotational movement of said resecting member.

12. A resection assembly to allow resection of a selected bone portion, comprising:

a positioning rod disposed within the selected bone portion through an incision formed relative to the selected bone portion;

a first guiding member moveable relative to said positioning rod;

a resecting tool extending along an axis and guided by said guiding member such that a selected portion of the selected bone portion is resected at a selected time; and

a second guiding assembly operable between said first guiding member and said resecting tool to select an axial movement of said resecting tool;

wherein said positioning rod and said resecting tool are passed through the incision.

13. The resection assembly of claim 12, wherein substantially only a portion of said positioning rod and a portion of the resecting tool pass through the incision.

14. The resection assembly of claim 12, wherein said positioning rod includes:

a bone engaging section extending along an axis; and

a first guiding member engaging section extending along a second axis;

wherein said first guiding member is rotatable about said first guiding member engaging section of said positioning rod.

15. The resection assembly of claim 12, further comprising:

a third guiding member operable to interconnect said first guiding member and said resecting tool;

wherein said first guiding member includes a portion extending from said positioning rod and rotatable about said positioning rod;

wherein said third guiding member allows for translation along said extending portion of said first guiding member to guide said resecting tool along said extending portion of said first guiding member.

16. The resection assembly of claim 12, wherein said resecting tool includes:

a resecting head adapted to be able to resect a portion of the selected bone portion; and

a shaft extending from said resecting head along said axis;

wherein said resecting head is movable along at least said axis or a second axis oriented relative to said axis of said shaft.

17. The resection assembly of claim 16, wherein said guiding assembly includes:

a sleeve positioned relative to said shaft; and

a depth guide member fixable to said shaft;

wherein said depth guide member is able to engage said sleeve portion to select the axial position of said resecting head to select a depth of the resection of the selected bone portion.

18. The resection assembly of claim 12, wherein said first guiding member is fixable relative to said positioning rod at a plurality of positions such that said resecting tool resects a selected position when said first guiding member is fixed relative to said positioning rod.

19. The resection assembly of claim 12, further comprising a depth guide assembly including at least one of:

a sleeve disposed between said first guiding member and the selected bone portion; and

a stop extending from said resecting tool operable to limit movement of said resecting tool relative to said positioning rod.

20. The resection assembly of claim 12, wherein the incision is about 1 cm to about 10 cm in length; and

substantially only said positioning rod and said resecting tool extend through the incision.

21. A method to resect a selected bone portion with a resecting assembly including a resecting tool that is guideable relative to a positioning member fixed relative to the selected bone portion, the method comprising:

forming an incision in a soft tissue relative to the selected bone portion;

passing the positioning member through said formed incision;

fixing the positioning member relative to the selected bone portion through said formed incision;

passing the resecting tool through said formed incision;

moving the resecting tool about the positioning member; and

resecting a selected portion of the selected bone portion to form a resected bone portion.

22. The method of claim 21, wherein forming an incision includes forming the incision to be about 0.5 to about 10 cm in length.

23. The method of claim 21, wherein forming an incision includes:
forming an incision generally on an anterior and near a distal end of a femur.

24. The method of claim 21, wherein fixing the positioning member relative to the selected bone portion includes passing a portion of the positioning member into a selected portion of the bone portion.

25. The method of claim 21, wherein fixing the positioning member relative to the selected bone portion includes passing a selected portion of the positioning member into a medullary portion of the selected bone portion.

26. The method of claim 21, further comprising:
operably interconnecting the resecting tool with the positioning member with a guiding member to allow the resecting tool to rotate about the positioning member at a selected radius.

27. The method of claim 21, wherein moving the resecting tool includes rotating the resecting tool around the positioning member at a selected radius.

28. The method of claim 21, further comprising:
selecting a distance that the resecting tool moves relative to the bone portion.
29. The method of claim 21, further comprising:
resecting a first condyle and a second condyle of a femur from substantially one position of the positioning member.
30. The method of claim 29, wherein moving the resecting tool allows the resecting tool to resect both of the condyles of the distal portion of the femur by moving substantially only the resecting tool and a guiding member.